

A specific kairomonal response of a mealybug parasitoid to the sex pheromone of *Planococcus ficus*

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Abstract

The attraction of *Anagyrus pseudococci* (Girault) (Hymenoptera: Encyrtidae) to the female sex pheromone of its major hosts, the citrus mealybug, *Planococcus citri* (Risso), and the vine mealybug, *Planococcus ficus* (Signoret) (Hemiptera: Pseudococcidae), was investigated. The response of the parasitoid to the pheromone was tested in the field, with pheromone traps set in citrus and fig orchards and vineyards, and in the laboratory, using static air olfactometer bioassays.

In both the field and laboratory experiments, the female wasps were attracted to the sex pheromone of *P. ficus*, (*S*)-lavandulyl senecioate. They did not respond significantly to the sex pheromone of *P. citri*. Despite the similarity between the structures of (*S*)-lavandulyl senecioate and (*S*)-lavandulyl isovalerate, another pheromone produced by *P. ficus*, the parasitoid did not respond to the latter compound. Data on the possible influence of host habitat on *A. pseudococci* behaviour, the host range of the parasitoid and its geographical origin will be presented and discussed.